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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,886	10/21/2003	Jerry Zucker	PGI6044P1131US	3882
32116	7590	06/27/2006	EXAMINER	
WOOD, PHILLIPS, KATZ, CLARK & MORTIMER 500 W. MADISON STREET SUITE 3800 CHICAGO, IL 60661			MATZEK, MATTHEW D	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 06/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/689,886	Applicant(s) ZUCKER, JERRY	
	Examiner Matthew D. Matzek	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. The amendment dated 5/24/2006 has been fully considered and entered into the Record. New claims 12 and 13 have been added and contain no new matter. Amended claims 1 and 10 contain no new matter. Claims 1-13 are currently active.

Claim Rejections - 35 USC § 102/103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103 (a) as obvious over Pike (US 5,935,883).

a. Pike teaches a web containing superfine microfibers comprising a blend of a first group of split microfibers which contains a blend of a two polymer components of which at least one is hydrophilic, useful in absorbent articles (Abstract). The invention additionally provides a meltblown fiber web (Abstract). The meltblown fiber web may be made of staple length fibers (col. 2, lines 38-44). The two layers may be combined via hydroentangling and is taught as a means of split fiber production (col. 8, lines 6-16 and col. 1, lines 53-61). Figures 1 and 2 illustrate the splittable fibers, which upon splitting yield fibers of equivalent denier/diameter. By adjusting the thickness of the conjugate microfibers, the split microfibers of the invention can be produced having a thickness of

about 0.2 μm or less (col. 4, lines 57-61). The article of Pike may be used for protective garments (medical barrier article, gowns), diapers, adult care products and sanitary napkins (col. 8, lines 28-32). Claim 1 is anticipated by the invention of Pike as the two layers of the absorbent article may be combined via hydroentangling (col. 8, lines 6-16 and col. 1, lines 53-61). Claim 2 is rejected because by adjusting the thickness of the conjugate microfibers, the split microfibers of the invention can be produced having a thickness of about 200 nanometers or less (col. 4, lines 57-61). Claims 10 and 11 have a broader scope than that of the article of instant claim 1 and as such are also rejected in the same manner as set forth in the Office Action dated 6/24/2005. New claims 12 and 13 are rejected as the superfine microfiber layer may further comprise a film layer. The additional layer for the laminate is selected to impart additional and/or complementary properties, such as textural and strength properties. The layers of the laminate can be bonded to form a unitary structure by a bonding process known in the art to be suitable for laminate structures, such as a hydroentangling process (col. 8, lines 6-17).

b. Although Pike does not explicitly teach the claimed feature of having the first fibrous component of the frangible fibrous layer exhibiting an elastic modulus at least 20% less than that of the second fibrous component of the substrate layer, it is reasonable to presume that said property is inherent to Pike. Support for said presumption is found in the use of like materials (i.e. frangible microfibers hydroentangled with staple fibers). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of having the first fibrous component of the frangible fibrous layer exhibiting an elastic modulus at least 20% less than that of the

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second fibrous component of the substrate layer would obviously have been present one the Pike product is provided. Note *In re Best*, 195 USPQ at 433, footnote (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

3. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103 (a) as obvious over Vonfeldt et al. (US 6,739,023).

a. Vonfeldt et al. teach a method of forming a nonwoven composite fabric comprising hydroentangling a first layer of spittable fibers and a second layer of staple fibers (Abstract). Figures 2 and 3 illustrate the splittable fibers, which upon splitting yield fibers of equivalent denier/diameter. Hydroentangling is also taught as a means of split fiber production (col. 2, lines 8-10). The splittable fibers applied invention have a denier of less than about 0.7 and most desirably a denier of less than about 0.01 (col. 2, lines 37-41). When using a density of 1.14 grams/cm³ (polyester fiber) the diameter of the splittable fibers is most desirably less than 1 μ m (conversions done by Examiner). The specific utilization of the article made by the Vonfeldt et al. process has not been disclosed in the applied patent, but as article meets the limitations set forth in claims 1 and 2 and as it may be made with activated charcoal and superabsorbent materials the article may serve in the roles instantly recited in claims 3-9 (col. 10, lines 10-42). Claims 10 and 11 have a broader scope than that of the article of instant claim 1 and as such are also rejected in the same manner as set forth in the Office Action dated 6/24/2005. Claim 1 is rejected as Vonfeldt et al. teach a method of forming a nonwoven composite fabric comprising hydroentangling a first layer of spittable fibers and a second layer of staple fibers (Abstract). Hydroentangling is also taught as a means of split fiber production

(col. 2, lines 8-10). The splittable fibers applied invention have a denier of less than about 0.7 and most desirably a denier of less than about 0.01 (col. 2, lines 37-41). When using a density of 1.14 grams/cm³ (polyester fiber) the diameter of the splittable fibers is most desirably less than 1 μ m (conversions done by Examiner).

b. Although Vonfeldt et al. do not explicitly teach the claimed feature of having the first fibrous component of the frangible fibrous layer exhibiting an elastic modulus at least 20% less than that of the second fibrous component of the substrate layer, it is reasonable to presume that said property is inherent to Vonfeldt et al. Support for said presumption is found in the use of like materials (i.e. frangible microfibers hydroentangled with staple fibers). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of having the first fibrous component of the frangible fibrous layer exhibiting an elastic modulus at least 20% less than that of the second fibrous component of the substrate layer would obviously have been present one the Vonfeldt et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

Response to Arguments

4. Applicant's arguments filed 5/24/2006 have been fully considered but they are not persuasive.
5. Applicant argues that Pike teaches away from the instantly claimed article because the applied patent discloses "at least one of the polymer components is hydrophilic". Applicant's article is described as a barrier fabric in the preamble to the instant claims, however no

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limitations as its specific composition that would yield such a property or details as to what the fabric is designed to block has been set forth in the instant set of claims. Therefore, Examiner takes the position that since the article of Pike anticipates the compositional and structural limitations and the article of Pike may be used for protective garments (medical barrier article, gowns), diapers, adult care products and sanitary napkins (col. 8, lines 28-32) the applied article may serve as a barrier fabric.

6. Applicant argues that since the Pike patent teaches that either both polymeric layers or a single layer of multi-component polymer fibers may be the splittable fiber layer it does not anticipate the instantly claimed article that has only the frangible fibrous layer be splittable. As stated by Applicant, Pike teaches that the single layer of polymeric fibers may be splittable. This anticipates the instantly claimed article.

7. Applicant argues that Vonfeldt et al. teach away from the instantly claimed article as Vonfeldt et al. teach a layer of staple fibers superimposed over a layer of split fibers. Examiner takes that position that the applied and claimed articles are two layer composites and the claimed article has a frangible fibrous layer and a second fibrous layer. Even though, Vonfeldt et al. refer to the split fiber layer as the substrate and the staple fiber layer as the top layer the two layer construct of Vonfeldt et al. possesses the two instantly claimed layers hydroentangled with one another. Therefore, the applied article anticipates that which is instantly claimed. For interpretation purposes Examiner has equated the splittable fibrous layer to the frangible fibrous layer of Applicant and the staple fibrous layer to Applicant's substrate layer.

8. Applicant argues that the article of Vonfeldt et al. teach splitting the continuous fibers prior to their incorporation into the staple fiber layer and as such does not does not anticipate the

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instant invention which claims to split and hydroentangle the article in one step. The Examiner takes the position that as the applied article teaches a split fiber layer hydroentangled with a staple fiber layer it anticipates the instant invention. The presence of process limitations on product claims, in which the product does not otherwise patentably distinguish over prior art, cannot impart patentability to the product. *In re Stephens*, 145 USPQ 656. Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to Applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292.

9. Applicant argues that Vonfeldt et al. teach that the splittable fiber layer is the substrate layer with the other layer requiring staple fibers and as such does not anticipate the instantly claimed article. Even though, Vonfeldt et al. refer to the split fiber layer as the substrate and the staple fiber layer as the top layer the two layer construct of Vonfeldt et al. possesses the two instantly claimed layers hydroentangled with one another. Therefore, the applied article anticipates that which is instantly claimed. For interpretation purposes Examiner has equated the splittable fibrous layer to the frangible fibrous layer of Applicant and the staple fibrous layer to Applicant's substrate layer.

10. Applicant argues that Vonfeldt et al. fails to teach a "barrier fabric" since the applied article is directed for use as an absorbent material. Applicant's article is described as a barrier fabric in the preamble to the instant claims, however no limitations as its specific composition that would yield such a property or details as to what the fabric is designed to block has been set forth in the instant set of claims. Therefore, Examiner takes the position that since the article of

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Vonfeldt et al. anticipates the compositional and structural limitations the applied article may serve as a barrier fabric.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is (571) 272-2423. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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PRIMARY EXAMINER